

### REMARKS

Applicants acknowledge receipt of the Office Action dated February 15, 2006.

In the specification, paragraphs [0010], [0012], and [0015] have been amended to correct minor editorial problems.

In amended Figure 1, an indication that the Figure is Prior Art has been added.

Claims 1-16 and 18-19 are pending in the application. In the Office Action dated February 15, 2006, the Examiner has rejected claims 1-3, 5-8, and 13-16 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Application No. 2002/0007861 ("the '861 Application") in view of Hopper *et al.*, U.S. Patent No. 3,378,673 ("*Hopper*"). The Examiner also has rejected Claims 4, 10, and 19 under 35 U.S.C. § 103(a) as unpatentable over the '861 Application in view of Montierth *et al.*, U.S. Patent No. 5,294,780 ("*Montierth*"). The Examiner indicated that claims 9, 11, 12, and 18 would be allowed if rewritten in independent form. As claim 18 is already an independent claim, Applicants thank the Examiner for its acceptance in current form.

By this Response, claims 9, 10, 11, 18 and 19 have been amended.

Applicants believe all pending claims are allowable over the art of record for the reasons set out below and therefore respectfully request reconsideration and allowance of all claims.

#### **I. Claims 1-3, 5-8, and 13-16 are patentable over the '861 Application in view of *Hopper*.**

Applicants respectfully traverse the Examiner's rejections of claims 1-3, 5-8, and 13-16 under § 103 as being unpatentable over the '861 Application in view of *Hopper*. In order to establish a *prima facie* case of obviousness, the Examiner must meet the following three elements: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference(s) must teach or suggest all the claim limitations. *MPEP* § 2143 (2005) (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991)). If just one of these elements is not met, a *prima facie* case of obviousness is not established. Applicants respectfully submit that this burden has not been met in the present case.

With respect to element (1) above, there are three possible sources for a motivation to combine references: (a) the nature of the problem to be solved, (b) teachings of the prior art, and (c) knowledge of a person of ordinary skill in the art. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. The mere fact that references *can be* combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. MPEP § 2143 (2005)

With respect to the present matter, there is no suggestion to combine the references. *Hopper* incorporates no metal tube and makes no suggestion (either expressly or impliedly) that such an device would be desirable. With respect to the '861 application, the focus of the invention is the elimination of the oxygen diffusion inherent in the use of polyethylene tubing. As acknowledged by the Examiner, the technology in the '861 application relates to the containment and movement of water that is already hot, and thus the application contains no teaching or suggestion of a conduit that is heated by a heater element. Neither reference contains any suggestion of modification in the manner taught by the present claims.

There is also no motivation to combine the references to arrive at the claimed invention in the "nature of the problem to be solved." The cited references, i.e. *Hopper* and the '861 application, are not directed to the same problem. *Hopper* is directed toward a heated hose assembly for maintaining a source of water liquid under freezing ambient conditions, while '861 is directed toward the elimination of oxygen diffusion in hydronic systems through the use of a metal-plastic multilayer pipe. Furthermore, neither reference relates to the problems addressed by the present invention. The absence of commonality between the problems to which the *Hopper* and the '861 application are directed means that a skilled person reading the references would not perceive any motivation to combine them.

Thus, with respect to the three aforementioned possible sources for a motivation to combine, neither (a) nor (b) are present here and (c), the level of skill of a person of ordinary skill in the art, cannot alone be relied upon to suggest a combination of references (MPEP § 2143).

Applicants therefore respectfully submit that the Examiner has not shown at least one element in a *prima facie* case of obviousness in rejecting claim 1, because, contrary to MPEP § 2143, the Examiner has failed to demonstrate that there is some suggestion or motivation to combine the teachings of the cited references.

Moreover, the Examiner is respectfully asked to consider the fact that both *Hopper* and the problems solved by the present invention are over 40 years old and yet no pipe appears to exist that incorporates the unique combination of features of claim 1. This lack of implementation substantiates the nonobvious nature of the present invention.

Furthermore, the favorable interest given the Applicants by a third party considering the manufacture of Applicants' invention further supports the nonobvious nature of Applicants' solution to an unsolved need. Applicants have attached hereto as Exhibit "A" a redacted email evidencing that a third party has expressed enthusiasm for pipes embodying the present invention. This further rebuts the assertion of obviousness.

Accordingly, Applicants respectfully request that the Examiner withdraw the § 103 rejection and allow claim 1. Since independent claim 1 is allowable, dependent claims 2-3, 5-8, and 13-16 are also allowable, as they carry with them all the limitations of claim 1.

**II. Claims 4, 10, and 19 are patentable over the '861 Application and *Hopper* as applied to Claim 1, and further in view of *Montierth*.**

Applicants respectfully traverse the Examiner's rejections of claims 4, 10, and 19 under § 103 as being unpatentable over the '861 Application and *Hopper* as applied to claim 1, and further in view of *Montierth*. The Examiner cited *Montierth* solely for his teaching of a PTC heater. Applicants submit that claims 4, 10, and 19 are patentable over the '861 Application, *Hopper*, and *Montierth* because there is no teaching to combine the cited references.

In contrast to *Hopper* and '861, *Montierth* is directed toward the post-fabrication incorporation of a heating and insulation network. Emphasis is placed on routing guides designed to simplify post-installation replacement of heating cable. This emphasis on "specifically a technique in which a section or sections of the heat-tracing cable can be readily replaced" (column 2, lines 7-9 *Montierth*) "teaches away" from the present invention, which requires no such guide channel members. In view of this, Applicants respectfully submit that the

Examiner has not shown an element in a *prima facie* case of obviousness in rejecting claim 19, because, contrary to MPEP § 2143, there is no teaching or motivation to combine the cited references. Therefore, Applicants respectfully request that the Examiner withdraw the § 103 rejection and allow claim 19.

Claims 4 and 10 depend from independent claim 1. Because the Examiner has failed to show that independent claim 1 is obvious in view of the prior art and because claims 4 and 10 depend from claim 1, claims 4 and 10 are allowable for the same reasons set forth above. Accordingly, Applicants respectfully request allowance of claims 4 and 10.

### **III. Allowable Claims**

Applicants thank the Examiner for the allowance of claim 18. Examiner stated in the Office Action that claim 18 would be allowable if written in independent form. As claim 18 is independent, its acceptance in current form is appreciated.

Claims 9, 11, and 12 have been amended to incorporate the limitations of the claims from which they depended and are now in condition for allowance.

### **IV. Note on Error in Published Application**

Please note that claim 4 has been typed incorrectly in the published application. The Claim was altered in a preliminary amendment to refer to claim 1 rather than to claim 3. In the version of the application published online, however, a typographical error has occurred, and the claim as written incorrectly refers to claim 13 rather than to incorporated claim 1.

### **V. Conclusion**

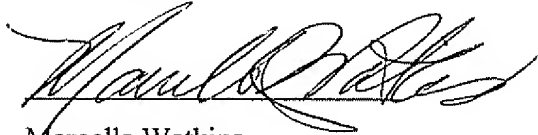
Applicants respectfully request reconsideration, allowance of the pending claims and a timely Notice of Allowance be issued in this case. If the Examiner feels that a telephone conference would expedite the resolution of this case, the Examiner is respectfully requested to contact the undersigned.

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or

dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art that have yet to be raised, but which may be raised in the future.

If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C. Deposit Account Number 03-2769.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Marcella Watkins', written over a horizontal line.

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ATTORNEY FOR APPLICANTS

# EXHIBIT A

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**From:** Alan Pearson [mailto:AlanPearson@heattraceuk.com]  
**Sent:** 12 June 2006 08:31  
**To:** Roberts, Peter  
**Cc:** Jason O'Connor; Mike McCool [Home]; Neil Malone  
**Subject:** RE: US Patent Application No. 10/525106 Hotwat Pipe Our Ref: PDR/LH/P89194PUS

Dear Peter

Apologies for the delay I have been away from the office for some time The answers to the questions are:

- 1) Yes we have sold the prototype products successfully
- 2) The company involved is actually German ~ The name is ~~Frankische Rohrwerke~~ You can view this company at [www.frankische.de](http://www.frankische.de) I met recently with one of the senior managers who is to propose to the company that they consider manufacturing this product line for us and also take it into their product lines He certainly made comments that this was a very interesting product and complimented their range

If you require any further information please let me know

Thanks and Regards

Alan

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